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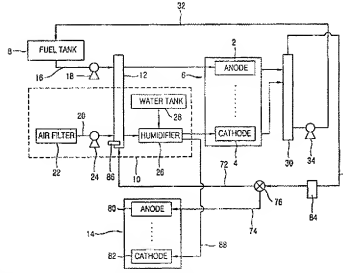
(54) Title: FUEL CELL SYSTEM AND CONTROL METHOD THEREOF



(57) Abstract: Disclosed are a fuel cell system and a control method thereof. The fuel cell system comprises: a main fuel cell stack (6) that an anode (2) and a cathode (4) are arranged in a state that an electrolyte membrane is interposed therebetween; a fuel supplying unit connected with the anode of the main fuel cell stack (6) by a fuel supplying line (16) for supplying hydrogen-including fuel to the anode; an air supplying unit (10) connected to the cathode of the main fuel cell (6) stack by an air supplying line (20) for supplying oxygen-including air to the cathode (4); and a sub fuel cell stack (14) for using hydrogen generated at the anode (2) during reaction as fuel. According to this, energy efficiency of a fuel cell can be increased and danger due to exhaustion of hydrogen generated at the fuel cell stack (6) can be decreased.

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